

Annual Report: 10
July 1959 - June 1960

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1959-1960 *Annual Report*

THE ROYAL ONTARIO MUSEUM

UNIVERSITY OF TORONTO

Number 10

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This report of the Director of the Royal Ontario Museum is reprinted from the University of Toronto President's Report for the year ended June 1960.

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The Director's Report

Were the years of the Museum to be named for significant creatures of the animal world, after the fashion of the ancient Chinese annalists, the period under review should clearly be denominated the year of Mole the Earthmover. Whatever accomplishments of a more enduring nature may appear in the record, staff and visitors alike will long remember the upheavals and discomforts inevitably attendant on the construction of the new subway. Planning of all public events had to be calculated in accordance with the anticipated schedule of excavation and to be adjusted for the delays caused by weather and other unforeseen impediments. The transfer of the Ming Tomb to its new outdoor site had to be completed in advance of the start of excavation. Special precautions had to be taken to safeguard fragile objects, both natural and man-made, during the period of pile-driving. From time to time rather curious routes of access to building and parking lot had to be improvised and a small drop in attendance could be directly attributed to such inconveniences as well as to the abnormal severity of the winter. All parties concerned in these discomforts, being aware of the undoubted future benefits to be derived from a subway at our door, endured them cheerfully, and we would like to record our appreciation of the T.T.C.'s constant regard for our special needs and problems.

Certainly the most conspicuous achievement of the year was the successful removal of the great Ming Tomb from its indoor gallery to a more spacious and effective open-air site in the North Court, where it can now be seen to far greater advantage. The transfer, long discussed but always postponed for want of funds and doubts about the effects of the Canadian climate on the ancient Chinese stone, was precipitated by the announcement of plans to start construction of the new subway at the Museum corner. Meanwhile the experience of other museums with modern stone preservatives had removed fears that the hazards of winter and industrial precipitations could not be controlled. This successful operation has two important side results: it made immediately available at virtually no additional cost some 6,000 square feet of desperately needed floor space for special exhibitions; and it completed the first and quintessential prerequisite to the realization of the future Bloor Street wing. Landscaping remains to be carried out, though grading and sodding of the courtyard are done. The ultimate refinements of this scheme call, when funds are available, for a viewing terrace off the Armour Court and a subterranean passage to permit sight of the burial chamber beneath the mausoleum proper. The chamber was constructed in the course of building the new foundations, but is for the present invisible.

Another conspicuous and important change, nearly finished at the year's end, was the result of successful negotiations between the Museum, the University, the Massey Foundation, and the Viscountess Lee to permit the transfer from Hart House to the Museum of the important Lee of Fareham Collection of medieval and renaissance objects in precious metals and other *objets d'art*. A specially designed new gallery which occupies the central portion of the former special exhibitions area on the main axis of the museum will be ready to house it before the publication of this report. We are particularly grateful to Lady Lee and the Rt. Hon. Vincent Massey for their understanding helpfulness in making the enjoyment of this splendid collection available to a far larger public, and to Sir Kenneth and Lady Clark for their aid and advice in the matter.

Visible achievements in other areas, to be discussed in greater detail below, include the opening of the three completely redesigned galleries devoted to English decorative arts of the eighteenth century; a series of special exhibitions climaxed by the international poster show IMPACT; the centralization and integration of all the Life Sciences libraries; the appearance of the first fruits of a new publications programme in the form of the Art and Archaeology *Annual*, several Occasional Papers, and the first two *Reports* from Information Services; the highly successful

addition to the regular lecture series of a lecture in French; and the astonishing public interest in the excavations of the Miller Site Indian village.

Less visible but no less significant innovations include the first year of work with the various curatorial departments by volunteers drawn from the Women Members' Committee, and a remarkable upsurge of inter-divisional co-operation which has immeasurably enriched the labours of individual departments. Notable examples of this were seen in the work of the Caribbean Project Committee and the preparations for the Poster show. The successful climax of extended efforts to secure underwriting for a long-term excavation in British Honduras was a moment of particular gratification and promises splendid future developments.

An event which it is to be hoped will prove unique was the theft of three paintings by Paul Kane, which were subsequently recovered in damaged condition. The episode drew attention to weaknesses in the security system, which were immediately corrected, and further measures are waiting on the report of a special advisory committee convened at the request of the Museum under the chairmanship of the Commissioner of Police.

The Museum was impoverished by the loss of three of its staunchest friends, Bishop William C. White, Miss Amice Mary Calverley, and Mrs. F. N. G. Starr. The Far Eastern galleries will always bear the imprint of the Bishop's great and informed interest in the early history and art of China. It was through his early recognition of the importance of the material being excavated in the region of his mission house while he was Anglican Bishop of Honan that much of the Royal Ontario Museum's celebrated collections of early bronzes, oracle bones, pottery and other antiquities were acquired and brought to Canada. After his retirement as Bishop he came to the Museum, full of vigour, as its first curator of the Far Eastern Department and did much, through the organization of the galleries and through teaching and publication, to make the collections known. His keen interest by no means abated with his official retirement twelve years ago and his last book, *Ancient Chinese Bronzes*, appeared little more than a year before his death at a very advanced age. It is most fitting that a group of his friends and students should have banded together under the chairmanship of Dr. W. J. Dunlop, former Minister of Education, to establish a fund in his memory. The Bishop's important work will thus be continued through research projects and other scholarly activity made possible by the proceeds of the fund. Miss Calverley's deep interest in and generosity to the Museum were recognized in a memorial exhibition, described elsewhere, which attempted to do some justice to her extraordinary personality and adventurous career as well as to show a part of her bequest and other gifts to the Museum. The Near Eastern, Textile, and European departments will remain permanently in her debt. Mrs. Starr was particularly interested in English antiques and Canadian history: she will be long remembered not only for gifts and bequests but also for the warm interest she and her sister, Mrs. Ross, have always taken in the Sigmund Samuel Canadiana Gallery.

The season's special lecture series provided varied and interesting fare. It was inaugurated by Dr. R. Ghirshman, Director of the French Archaeological Museum in Iran, who spoke on "Une Tour de Babel en Iran." This was the first public lecture ever delivered in the Museum in French and, thanks to the enthusiastic co-operation of the French societies and the French newspaper in Toronto, it drew a capacity audience. Mr. Philip Rosenthal II, head of the famous Bavarian porcelain works, gave a provocative lecture on "Industrial Design—Art or Business?" in the precise accents of the British Foreign Office, of which he is a former member; Dr. José Pita-Andrade of Madrid excited wanderlust with "The House of Alba and its Collections," of which he is the Curator; Miss Edith A. Standen of the Metropolitan Museum gave a talk as witty as it was learned on what might have appeared to be a subject of recondite interest, "Preferred Seats: Upholstering in the Eighteenth Century"; Mr. Seiroku Noma, Chief Curator of the National Museum of Tokyo, gave, with the aid of unusually beautiful slides, a phonetic manuscript and a vernacular summary by Mr. Trubner, a concise and entrancing introduction to "Characteristics of Japanese Art"; Mr. Hensleigh Wedgwood, at the only public

event during the Fifth International Wedgwood Seminar taking place in the Museum under the chairmanship of Mr. Spendlove, spoke on "The Evaluation of the Ceramic Art in Staffordshire"; and Dr. Eleanor von Erdberg Consten of Aachen presented a brilliant lecture on "Chinese Bronzes." A series of four public lectures was also presented during late January and February in connection with "Atoms at Your Service."

The Board approved, after long study by the curatorial and administrative staffs and the Heads' Committee, policies and procedures relating to acquisitions, disposals, and various aspects of public relations and information activities and, after considerable debate, a proposal to charge regular admission to all but school children, registered students, and Members as a means of supplementing the budget. It was able, under the devoted Chairmanship of Mr. Harold M. Turner, effectively to pursue a variety of important matters relating to special projects requiring extra-budgetary support, and its Silver Committee gave valuable expert and practical assistance to Mr. Brett's department.

While no substantial progress can be reported in the matter of broadening the membership, extraordinary service was given the Museum in nearly all its curatorial, teaching, and administrative departments by the energetic Women Members' Committee, a volunteer group of busy young women who found time to devote over 1,600 hours to a remarkable variety of odd jobs which could not have been done without their assistance. Thirty-one of the thirty-five members of the group were able to serve and thirteen of them worked straight through from October until May. They typed, catalogued, helped with display, sold tickets and catalogues, cleaned, bound books. They carried out intelligently, conscientiously, and enthusiastically every task assigned them. From every Division of the Museum came glowing reports and expressions of gratitude for their appreciation of our need and their practical response—and an increased number of requests for next year. Great credit is due to their hard-working placement chairman, Nora McRae, and to Mrs. Helen Downie, who co-ordinated staff requests. The rewards of these volunteers are inconspicuous, but as they themselves put it, they have each had the satisfaction of a small, quiet job done and the joy of learning something far removed from their normal experience. Special volunteer help is also gratefully acknowledged to Mrs. Alice Ferris for her thorough study, recataloguing, and rearrangement of the collection of Chinese blue-and-white porcelain; to Mr. Frank Ebbutt for his assistance in the planning and construction of Earth Sciences' large illuminated map of Canadian mineral resources; and to Mrs. Jessie Ogilvie for her hard and cheerful work as an apprentice with Mr. Parker's display department. It is good to note that because of her serious and gifted interest, it has been possible to arrange for Mrs. Ogilvie to have further training at the Victoria and Albert Museum in London.

The volume of the Museum's contributions to learning can be appreciated from the bibliographical appendix and the rate of growth of its collections from the appendix on accessions. Its staff participated in professional and scholarly meetings to an unprecedented extent, was active in civic affairs, and carried the Museum's fame far and wide. Indeed, Dr. Meen's travels took him even to Burma, and the Director examined the great Islamic monuments of Central Asia as well as the museums of Russia.

Perhaps the most heartwarming of all the honours and awards bestowed on members of the Museum staff was the award to our Honorary Curator of Invertebrates, Professor E. M. Walker, of the Royal Society's Flavelle Medal for Section V, in recognition of his notable contribution to knowledge through the publication of the first two volumes of his three-volume work on the *Odonata* of Canada and Alaska. This work has been largely carried out in the Museum during his years of "retirement," and publication of this important work was arranged with the assistance of Life Sciences Division. Other honours are listed in the appendix to the President's Report. Dr. Meen served as chairman of the nominating committee of the Mineralogical Society of America, represented Canada in the Museums Commission at the meetings of the International Mineralogical Association in Switzerland, and was appointed to the National Research Council's Associate Committee

on Meteorites. Dr. Tovell continued to serve on the Board of Arbitration of the provincial Fuel Board, was appointed to serve with the Geological Advisory Group of the Toronto Transit Commission in connection with subway construction, was chairman of the programme committee for the Geological Association of Canada and was elected Secretary-Treasurer of that organization. Dr. Crossman was appointed to the Board of the Canadian Society of Wildlife Fisheries Biologists and to be that society's editor. Mr. Taylor was appointed to be Director of the new Aquarium in Calgary. The Director was the delegate of the Canadian Museums Association to the triennial meetings of the International Council of Museums held at Copenhagen and Stockholm in July, 1959, represented Canada at the organizational meeting of the International Association of Allied Art Councils at Washington in October, was elected to the Board of the Canadian Conference of the Arts and re-elected to that of the Canadian Museums Association. The Museum itself received a number of awards for the typographical excellence of its publications, one national graphic design award in the United States, one in Canada, and local awards at art directors' exhibitions in both Toronto and Montreal.

Miss Helen Fernald officially retired on June 30 as Research Curator of the Far Eastern Department, but will remain in close association with the Museum at least until completing her long-awaited volume on Chinese burial figures. Curatorial appointments were given to: Dr. Joseph A. Mandarino as Associate Curator of Mineralogy; Dr. George Dales, Assistant Curator, Near Eastern Department; Dr. E. S. Rogers, Curatorial Assistant, Ethnology. It may be felt appropriate here to express our appreciation to Mr. David McClure, who was on loan for the year from the Toronto Board of Education to fill the place of Mrs. Dunbar during her leave of absence.

The various Divisions and departments of the Museum entertained a record number of colleagues from all over the world and to list them all would be impossible, but a few of the eminent visitors may be singled out for the record. Her Royal Highness Princess Alice, Countess of Athlone, an old friend of the Museum, spent a happy afternoon here with Lady Eaton. Her Majesty Queen Joanna, Queen Mother of Bulgaria, with informed interests in Chinese and classical art and mineralogy, was a repeated visitor. Her Excellency Mme Georges P. Vanier paid her first visit, attended by Mme Therèse Berger. Our good friend the Rt. Hon. Vincent Massey came to see the progress of the Lee of Fareham Collection transfer and the new English galleries. Other distinguished visitors included the Duke of Northumberland, who was delighted to find the mates to a pair of duelling pistols in his own collection; M. René Huyghe, Professor of the History and Psychology of Art at the Collège de France, and Mme Huyghe; Their Excellencies Pierre Dupuy, Canadian Ambassador to France, and Frithjof Jacobsen, Norwegian Ambassador to Canada; Professor Spyridon Marinatos, Rector of the University of Athens; Dr. Auni Dajani, Director of the Department of Antiquities of Jordan, and Mme Dajani; Mr. Sing-wu Wang, Director of the Provincial Taipei Library, Taiwan; Mr. Seiroku Noma, Chief Curator, Tokyo National Museum; Sir Adetokunde and Lady Ademoto, Nigeria; Mr. Eric Harvie; Miss Lea Chapon, Présidente du Conseil d'Administration, Fédération Internationale de l'Union Artistique et Culterelle; Dr. Glyn Daniel, Editor of *Antiquity*, Cambridge University; Mr. Peter Swann, Oxford University; and Miss Irene Worth.

For all the satisfying evidences of progress and achievement during the Museum's year, there are, as in life itself, frustrations, disappointments, and the frequent feeling that more or better might have been done. Two acute, unsolved problems face and thwart every division and department of the Museum, and both depend for ultimate solution on the finding of additional funds which are not yet in sight. These problems, various as they are in detail, can be summarized under the headings of Space and Staff and Salaries. Any visitor to the building can see that gallery space is and for a long time past has been insufficient for the proper display of the collections; a few visitors may be to some extent aware of the cramped and overcrowded office and laboratory conditions under which the majority of the staff must work; remedy is in sight with the University's building programme for some

of the space problems connected with students' work in the Museum; but few can be aware of the desperate problem created by the absence of adequate or safe storage space which haunts most of the curatorial staff. Two Divisions, Life Sciences and Art and Archaeology, have reached the point of nightmare in this respect. Art and Archaeology, long obliged to use a variety of inconvenient and unsafe depositories outside the building, is faced with the early loss of two of these, and meanwhile has been obliged to withdraw portions of public gallery space in five of its departments in order to find emergency solutions. While such measures are planned to cause as little public or student inconvenience as possible, the necessity for any such expedient is deplorable. It is not only museum objects and valuable research material which are involved. There is considerable waste as a result of our inability to store display and packing materials, redundant cases and other things which should not properly be considered expendable. And even the active Sales Desk loses much revenue for want of adequate space to display or store its stock. Since in neither stage of planning the existing building did the architects provide for more than token internal storage, it appears that either future extensions to it will have in considerable part to be devoted to storage or else we will be obliged to follow the example of other large museums and build, buy, rent or borrow a warehouse. A subsidiary aspect of the space dilemma is the absence of any effective humidity control for the preservation of many categories of museum materials, whether on display or in storage, particularly in the Divisions of Art and Archaeology and Life Sciences. The problem is under study by the Superintendent's Office, but the temporary expedient of using various types of small commercial humidifiers during the past winter was a failure. The proper solution is clearly the installation of a complete air-washing and air-conditioning system for the half dozen departments for the preservation of whose collections fully controllable heat and humidity conditions are essential, and no future building can be considered which does not provide such conditions. The initial cost would be great but this must be balanced against the value of the collections to posterity and the heavy cost of trying to maintain them against all the hazards of no control system.

While very substantial progress has been made in the past few years in building up staff and improving salaries, the "austerity" budget of the current year (and its repetition for the next) have prevented serious consideration of the Museum's establishment needs—full recognition of which would permit planned rather than expedient expansion of staff—or the completion of the programme begun in 1956 to rationalize salary standards. Only three categories of museum employees are considered at present to enjoy fully competitive salaries—teachers, librarians, and the guard and maintenance staffs. Curatorial salaries are now at roughly only 75 per cent parity with faculty salaries, a fact which makes the recruitment and holding of curatorial personnel who meet the standards we wish to maintain very difficult. A study made by a management consultant firm has not yet resolved similar inequities in the salaries of certain key technical and administrative personnel. We are confident that the progress already made is a token and good omen for further advance in the future and that our willing membership in the University family will ultimately earn for us its full privileges.

In summary, the balance sheet of the Museum's Year of Mole the Earthmover appears favourable, its failures and shortcomings easily outweighed by its achievements. From the Board and the administration to the service staffs, guards, and cleaners, throughout the curatorial and technical staffs, all have been steadily aware of both their own responsibilities and of the contributions which only the Museum can make to the education and enjoyment of the people of this Province. The staff accepts and enjoys the Museum's expanded role in the University and the community. If, as must happen to any vital institution, the demands made upon the Museum by its diverse and constantly growing publics sometimes outrun its ability to satisfy them, we are ready to do our utmost. Even if it sometimes seems that responsibilities grow in geometric proportion while our capacities increase in arithmetic proportion only, in the challenge is our justification.

The individual histories of the various major branches of the Museum are as follows:

The manifold and diverse activities of the Museum's largest division maintained their normal tempo, while managing to expand in several aspects and to achieve the completion of certain long-range projects. The scholarship which underlies every aspect of its work was, as always, the subtle link which binds all the parts into the whole. It is this careful and constant research, some of it entirely new, some in the form of revision of previous labours where additional information has demanded fresh study, which is the necessary prerequisite to the presentation of all the objects and collections. The extensive bibliography in the appendix gives only a partial view of the volume of research completed by members of the Division, as would a list of further works not yet ready for the printer; the preparations for the reinstallation of a gallery, for the cataloguing of newly acquired objects, for the labelling or re-labelling of single exhibits, for a single lecture, for a special exhibition may all require the same kind and extent of research as is required in the writing of a book or learned article, while each contributes its share to the advancement of knowledge and hence of understanding and enjoyment. As in the other Divisions, no small part of this research is based on field work, where the findings based on the raw materials of the specific problem may result in quite original contributions to the limits of the known.

The most readily visible of these labours, apart from the already mentioned removal of the Ming Tomb to its new location in the North Court—passengers in the streetcars have been overheard to remark "Have you seen that the Museum has put the China collection in the open air?"—took the form of special exhibitions and the reinstallation of several galleries. Some eighteen temporary exhibitions, all but two of them initiated within the Museum, were shown by the Division, not to mention the rotation of certain categories of exhibits, particularly in the Textile and Ethnology departments. Pride of place among these shows was incontestably won by "IMPACT: Poster Art of the World," which during the spring months inaugurated the new Exhibition Hall created by the removal of the Ming Tomb and seems already to be having a perceptibly salutary effect on Canadian graphic design. It presented in a selection of six hundred examples, selected from nearly ten times that number submitted from forty-four countries, the best work of the best designers of the past decade and was introduced by a section demonstrating the history of the medium over the past century. The show, brilliantly installed by Mr. Harley Parker and his staff, was developed by Mr. John Hillen, Display Chief of the Earth Sciences Division, who bore the principal brunt of assembling the materials over a period of nearly three years, served on the selection committee, and wrote the introduction to the handsome catalogue. The catalogue, edited by Mr. John Lunn, was itself a suitably distinguished example of good graphic design by our typographical consultant, Mr. Frank Newfeld. The creation and presentation of this original, attractive, and stimulating show required the help, imagination, and devoted labours of innumerable members of the staff of every part of the museum plus that of some volunteers. It is honoured by being featured as the principal art exhibition of the Vancouver Festival during the summer of 1960 and will subsequently be shown in Montreal (Ecole des Beaux Arts) and in a number of large American museums, while a reduced version for the more limited facilities of smaller institutions is being circulated by the American Federation of Arts.

The exhibitions staged in the old special exhibitions area were: "Modern Pottery from Abroad" (summer, 1959); "Typography '59" (October); an enchanting Christmas exhibition of nineteenth-century toys lent by Mr. Percy Band (installed with the enthusiastic assistance of Mr. and Mrs. Band); and a show of some 400 Christmas and New Year greeting cards from the Coutts Hallmark Historic Collection (December-January); the Memorial Exhibition to our lamented friend, Amice Mary Calverley, composed of textiles, ceramics, and antiquities given or bequeathed by her to the R.O.M. and the four magnificent volumes which were the result of her principal scholarly work in recording the reliefs on the temple of Sethos I at Abydos (January-February); loan exhibitions of prints by the eminent

Japanese contemporary, Shiko Munakata, and of metal and lapidary work by members of the Metal Arts Guild of Ontario (March); the first presentation of the magnificent Assyrian ivories received in return for the Museum's assistance to Professor Mallowan's excavations at Nimrud (April); and a choice selection of English, Continental, and Far Eastern pottery (April and May) to accompany and celebrate the Fifth International Wedgwood Seminar. The Canadiana Gallery presented two major exhibitions. The autumn show, "Wolfe and Montcalm: The Struggle for Canada," was designed to commemorate the 200th anniversary of the Fall of Quebec; the spring show, "Water-Colours of Canada in the Middle Nineteenth Century," was supplemented by a group of works by William Armstrong lent by Mr. Percy Band. The Museum notes with gratification that the work of the earlier Canadian water-colourists, so richly represented in the Sigmund Samuel Collections and so carefully exhibited and documented by Mr. Spendlove, is winning an ever widening circle of friends and connoisseurs. The Lower Rotunda shows included the première of a travelling exhibition of photographs, principally of Persia, by D. W. Buchanan, Associate Director of the National Gallery, Ottawa; a travelling exhibition of photographs of Angkor Wat; a revealing exhibition of photographs by Gaby of Montreal of daily life, particularly that of artists, in the U.S.S.R.; a further group of water-colour recordings by Selwyn Dewdney of Indian pictographs in northern Ontario; a Christmas show of paintings and photographs by members of the staff; the debut exhibition of photographs by Ralph Greenhill, whose inquisitive and quizzical eye is sharply focused on Toronto; the annual Easter exhibition of children's work done under the supervision of Miss Berlin by the members of the Museum's Saturday Morning Club; and finally an overflow section of IMPACT.

A subject of perpetual debate within the museum profession is whether the energy and money devoted to temporary exhibitions would not be better expended on improvement of permanent installations. There is merit in the arguments on both sides, but majority opinion agrees that a healthy museum can neglect neither. This year, after lengthy preparations, the Division reports with pride the completion of several projects concerned with the reinstallation of important segments of its holdings. "Permanence" in a museum as elsewhere is a relative term and the life of a museum depends quite literally on the care with which the Board and the staff avoid the appearance in its galleries of that static quality which the public instantly labels as dusty or dull. A bold step forward in the plans for redevelopment of various portions of the permanent displays which the Museum is first to admit have become outdated was realized with the gala opening in November of the rebuilt English eighteenth-century galleries, an event which took the place of a major autumn exhibition. In this suite of now well-designed and well-lit rooms with comfortable sitting places among them, a workable solution appears to have been found to the problem of how to combine attractively and lucidly a systematic presentation of stylistic and technological developments in the decorative arts with acceptable vignettes of the use of such objects in the life of the time. The greatly increased volume of regular visitors to this area is most gratifying and the lessons learned in the course of designing and construction will be of great value elsewhere. A smaller demonstration of what such rehabilitation can accomplish may now also be seen in an old cul-de-sac on the main floor which has blossomed as a gallery devoted to Spanish and Italian *majolica*, and considerable rearrangement has been carried out in other European galleries by Mr. Brett and Mr. Hickl-Szabo. At the same time very extensive work has been done in the repair of objects, notably furniture, for these galleries by the conservation and display departments.

The staggering problem of what to do with the Far Eastern galleries remains unresolved and final solutions will undoubtedly have to await decisions on the desperately needed Bloor Street wing and the equally desperately needed provision of adequate and permanent storage space, a problem no less severe for the Ethnology Department. Meanwhile a temporary and far from ideal solution has been found which has required the closing of all or parts of several galleries in order to provide work and storage space for objects removed from exhibition for study or because of redundancy. This arrangement has at least the virtue that now the trees can be

seen for the wood and the superb quality of many of the objects can at least be appreciated in reasonable comfort. This we hold to be more important than the often numbing effect the overwhelming number of items formerly on exhibition had on most first-time visitors, and the facilities for qualified students are such that access can be had almost immediately to duplicate materials. It is hoped that ultimately a system of primary and secondary galleries can be contrived which will fully satisfy the legitimate needs of both groups, and plans suggested by Mr. Trubner are now under study for a trial arrangement within the existing limitations of space which will show for the earliest periods of Chinese art and archaeology what might be done for their entire range. The new Lacquer Court, including the James Hahn and Crofts Collections, has at last been completed, much work has been done in the T'ang and Sung galleries, and rearrangement of the old Japanese Print Gallery has permitted proper display of some of the Museum's important recent acquisitions in the fields of ancient and medieval Japanese painting and sculpture.

It may be noted here with due gratitude that the increased tempo of redecoration of galleries throughout the whole building by the Superintendent's Office has produced a notable improvement in appearance even where little or no reinstallation has yet been attempted. The Athens Gallery is still not ready for the public but has progressed to the point that limited access is now available to school children and Miss Sylvia Hahn's reconstruction of the Phidian Athene based on new research by Mrs. Leipen is almost finished. The Minoan-Mycenean Gallery has been refurbished to permit incorporation of some of the fine Cypriote statuettes received several years ago as a gift from the National Gallery, while a special installation has been made in an adjacent space for the superb Nuraghe spirit boat from Bronze Age Sardinia which is on extended loan from Mr. Joseph Hirshhorn. Considerable progress has been made by Mr. Lunn in revision of the Roman and Prehistoric galleries and the transfer of the Palestine Gallery to a site adjacent to the Egyptian and Ancient Near Eastern galleries has greatly improved the intelligibility of this sequence. Increased appreciation of the scope and importance of the Prehistoric collections has suggested that in a future revision these may form a truly worthy as well as essential introduction to all the galleries devoted to the early history of the Old World.

The Ancient Near Eastern galleries have very recently profited by the incorporation of the ivories and other objects received as the Museum's share of the Nimrud excavations and of a group of jewelry from the Royal Cemetery at Ur sent on indefinite loan from the University Museum in Philadelphia. The Persian Gallery also has a new look, thanks to repainting and a welcome thinning of objects displayed. The unusual tempo of growth of the Textile collections together with this department's exacting policy of rotating displays and its woefully inadequate storage and work space have in no way diminished the enthusiasm of its conspicuously ebullient staff. The equally rapid expansion of the number of student and professional visitors using its study room and the visibly increased interest of the general public all bear eloquent witness to the now high reputation of this department both locally and among its peers in the great museums of America and Europe.

The Ethnology Department, enduring intolerable pressures of space and heavy overloads of field work and other commitments, has been able to make little progress with its gallery work but has borne all its trials with patient forbearance. Not the least of these was the long overdue reflooring of the Long Room, which meant not only a displacement of most of the staff but of countless thousands of objects normally stored there. At this moment the temporary quarters were additionally inundated with a large gift of African material. The department's most notable achievement in this area might be described as falling within the arts of storage as opposed to those of display: the availability of some storage space in former locker rooms in the Household Science Building across the street finally permitted evacuation of a dangerous and destructive "temporary" storage area in Flavelle House. Dr. Rogers was thus able not only to transfer, sort, catalogue, repair, and arrange many thousands of items which had not been seen within living memory because of their inaccessibility, but to make this valuable material available for

reference and study. Three small installations were arranged by the department during the year apart from the several cases now regularly devoted to new accessions. Two of these, from museum materials, dealt with water transport in the north and the ethnography of the Round Lake Ojibwa, while the third, largely composed of materials on loan from the National Museum, Ottawa, showed small Eskimo objects in ivory and bone. The department was also happy to inaugurate a new system which has greatly facilitated the provision of study materials for its fellow teaching department in the University.

The Canadiana Department, with a modern building and a new wing, has not yet suffered from the acute space problems which face all departments in the main museum, but the constantly growing collections, which enjoy the unflagging generosity of Dr. Sigmund Samuel, had begun to present problems of storage and security. A total revision of the former and refinements to the latter carried out during the year have produced substantial improvements in the availability, conservation, and safety of these important materials.

An extended account of research being carried on by individual members of the Division will be found in the Head's introduction to the forthcoming Art and Archaeology *Annual*, but several works-in-progress should be noted here. The Museum is happy to announce that at last its efforts to find the necessary support to undertake a long-term archaeological excavation at a site long reserved for us in British Honduras have borne fruit. Through the great generosity of several private donors who prefer to remain anonymous, financing has been arranged to start this important undertaking during the next winter and to carry it forward over a period of five years. Appointment of a field director to supervise it was pending as this report was written. The Division, through Dr. Tushingham and Miss Needler, has conducted still inconclusive negotiations with the Department of External Affairs with a view to obtaining Canadian participation in the emergency drive sponsored by UNESCO in conjunction with the Egyptian Government to record and salvage as much as possible of the historic antiquities of the Upper Nile Valley which will shortly be submerged in consequence of the construction of the new High Dam. The Museum will be represented in another overseas excavation during the next year by our newly appointed Near Eastern assistant curator, Dr. George Dales, who will be working with the American team at Nippur in southern Iraq.

The Ethnology Department's regular programme of excavation in Ontario, which has concentrated for some time on two regions—the Trent River Valley in the east and the Rainy River district in the northwest—had temporarily at least to take second place to what was at first envisaged as an emergency salvage operation: this was Mr. Kenyon's excavation of an early Indian village on the Miller Site near Pickering, which turned out to be of such importance that for probably two more years it will be a major centre of activity. The Museum excavation at Serpent Mounds continued under the direction of Mr. Richard B. Johnston, Mr. Selwyn Dewdney conducted another successful season of pictograph recording, and Mr. Kidd, at the request of the National Museum, carried out preliminary but inconclusive excavation at Quebec City in an endeavour to identify the site of Cartier's first settlement. Dr. Rogers' first report on the important field work completed by him in the Patricia District at the beginning of the reporting year was delivered to the Editorial Committee and will shortly appear under the title of "The Round Lake Ojibwa: A Socio-Economic Study."

Publication of Mr. Burnham's *Chinese Velvets* as a divisional Occasional Paper has received international welcome and recognition as a basic contribution in a field of wide scholarly interest. It is much regretted that lack of regularly available funds forced postponement of the programme of conservational research begun two years ago under what appeared to be such auspicious circumstances by Mr. Todd in collaboration with the Ontario Research Foundation. This programme, if it can be continued on a firm basis, promises results which would be of value to scores of institutions throughout the world as well as to our own.

In the field of direct education many members of the divisional staff have devoted considerable time to lecturing, public speaking, and radio and television

appearances, thus aiding not only in the training of students but in disseminating the Museum's message to the most diverse audiences. Lecture courses or occasional lectures were given to regular University classes, to Extension classes and to students of the Ontario College of Art, the Ryerson Institute of Technology, Macdonald Institute, the provincial Institute of Technology and others. A number of papers were delivered before learned societies. In the field of professional training of museum workers, an area in which the R.O.M. has long been considered an elder brother to the scores of smaller museums throughout the province and Canada as a whole, particular gratification was felt by the Division in the opportunity to act as host and docent for two months to this year's two students enrolled in the National Gallery's training programme. The aptitudes of Miss Maria Louisa Funke and Mr. Gyde Shepherd were of such an order that Museum felt it had benefited as much from their presence as they did. In a more specialized field, the Museum was also pleased to have as a guest for three weeks Mr. T. Twareki of the National Museum, who was working with Mr. Todd in order to familiarize himself with the techniques and materials used in the conservation of archaeological material.

Central to the activities of any year is the unremitting effort to expand and improve the Museum's collections through whatever means are available to it—purchase, gift, bequest, field work, trade, extended or permanent loan. The Division anticipated a thin year as most of the provincial Special Grant, normally applied principally to the purchase of objects beyond the regular but small departmental appropriations, had to be applied to the moving of the Ming Tomb. However, as the appendix on acquisitions will show, the generosity of friends of the R.O.M. was of such an order that the volume of accessions is imposing. Special note should be taken of certain items or collections. The gifts and bequests included the bequest of Amice Mary Calverley's extensive collection of Roumanian weaving and embroidery, Greek, Cretan and other weaving and of English, Turkish, Persian and other embroideries; gifts of Mrs. Edgar J. Stone of a select collection of Japanese costume and textiles, southeast Asian textiles and T'ang and Sung objects in gold; a bequest of English silver from Mrs. F. N. G. Starr and of furniture given in her memory by her sister, Mrs. W. D. Ross; the gift of Japanese archaeological material from Mr. Roy Cole; the gift by Miss O. D. Dahlgren of a pink silk velvet robe belonging to Queen Alexandra which, it has since been discovered, was worn with a gown long in the Museum's collections; the gift from Mr. J. Harold Crang of six important items by the early Ontario gunsmith, John Gurd; additions to the collections of works by Shibata Zeshin established in memory of his father, Charles Edgar Stone, by Mr. Edgar J. Stone; a collection of African and other ethnological materials given by the Harris heirs of London, Ont.; a group of important Dogon and Ibo carvings given by Mr. Samuel J. Zacks; and last but hardly least a large number of water-colours, prints, maps, and books added with his unflagging generosity by Dr. Sigmund Samuel to the Canadiana Gallery.

Outstanding purchases included a hanging scroll of the Kamakura period depicting the Taima Mandara or Buddhist Heaven, a ninth- or tenth-century Japanese demon in wood, a sandstone fragment of the Mathura School of the first or second century A.D., and a Sung porcelain stem-cup in Ch'ing-pai ware bought in memory of Canon Henry John Cody; several fine pieces of Minoan and Mycenaean pottery; a splendid crimson pile-on-pile velvet and embroidered dalmatic from the Spain of the early sixteenth century, a group of eighteenth- and nineteenth-century costumes purchased from the Holt Renfrew Fund, and a superb Persian figured silk-velvet from the looms of Shah Abbas, unique for its size, preservation, and elegant drawing of the five ladies depicted (acquired with the special assistance of Mrs. Edgar J. Stone); a Benin head in wood; a Madonna and Child in polychromed wood by the Renaissance sculptor-architect, Jacopo Sansovino; an imposing English japanned cabinet of the late seventeenth century on a silvered base; additions to the pre-Columbian collections; and a brass pocket compass interesting because it was given by General Brock to Tecumseh.

In addition to the transfer by the Massey Foundation of the Lee of Fareham Collection to the Museum from Hart House, already mentioned, other important

materials deposited on permanent or extended loan were received from Miss Helen Norton of Ayer's Cliff, Quebec, who has been a most generous benefactor over a period of many years; from Mr. Joseph Hirshhorn, Mrs. Jan de Redlich, and Mr. E. J. Mayer de Berncastle; and from Henry Birks and Sons who, through purchasing and lending back on an indefinite basis, enabled the Museum to save a fine collection of English silver which would otherwise have been lost to us.

The receiving of loans, especially for special exhibitions, imposes obligations of reciprocity and the R.O.M. has not been remiss in this respect. Mention has been made of the itinerary of our own poster show. The Museum was proud to be represented in a major European exhibition of Chinese painting which was seen in Munich, The Hague, and Paris. The current travelling exhibition, "Ghandaran Art from Pakistan," being circulated by the Smithsonian Institution, includes two of our sculptures. The success of Mr. Spendlove's book of two years ago, *The Face of Early Canada*, has led to the organization of a special exhibition under this title of 54 prints from the Sigmund Samuel Collection, which is being circulated to nine Canadian museums by the National Gallery. The Toronto Art Gallery's spring Venetian exhibition was enhanced by the loan of a variety of objects from our collections, and a large selection of our Ontario textiles formed the material of a special exhibition at Dundurn Castle, Hamilton.

Earth Sciences

Any regular visitor to the Museum since the late winter will have noticed one remarkable improvement the instant he set foot into the Rotunda, for the limited light that God and the architects permitted to illumine the splendid collections in the Mineralogy Gallery has been assisted by the installation of a new system. Visibility has been increased to about ten times the previous candle power, with the result that the splendours of this important department can now be studied in real comfort. A conspicuous new case for recently acquired gemstones and refurbishing of the special case for the Star of Lanka are smaller indications of the intense activity within the department.

This increased tempo was the immediate result of the appointment of a new associate curator, Dr. Joseph A. Mandarino (formerly of the Michigan College of Mining and Technology) at the beginning of the reporting year and of the fact that for the first time in many years the Head of the Division was carrying no teaching assignment. The new arrangement, apart from its obvious advantages within the Museum, permitted Dr. Meen to make two very extensive journeys during the year, in the course of which he was able to establish a series of exchange agreements in areas very important for the collections as well as to do some field collecting himself.

The long-range programme for the total reconstruction of the Geology galleries was marked by substantial, if as yet invisible, progress in the East Gallery and it is now confidently hoped that this can be opened to the public as one of the first events of the Museum's jubilee celebrations in 1962. Although carrying a heavy extra burden because of his essential part in arranging the poster exhibition, Mr. Hillen was able to complete the great illuminated map which will be the central feature of this gallery, and two fluorescent geological maps flanking it. The large map, containing over a quarter of a mile of wiring installed by Mr. Hillen, shows most ingeniously with the touch of a pushbutton all the important active, potential, and major abandoned mineral deposits of Canada. The Museum is particularly grateful to Mr. Frank Ebbutt, an Honorary Life Member, for his great assistance towards this project through data supplied and critical analysis as the work progressed. Much other construction of detailed exhibits for this gallery was also completed. The Mineralogy Gallery now possesses one entirely new wall case for new exhibits and a display of models of famous diamonds, both prepared by Mr. Vanstone.

Two special exhibitions were presented during the year. The first of these, on view from November 19 until April 3, "Atoms at Your Service," was a co-operative venture undertaken in conjunction with government agencies and corporations in-

terested in the use of Canadian uranium and attempted, within a too restricted physical area, to portray Canada's role in the field of atomic energy. It also fell short of our own hopes as the Museum staff did not have full control of the exhibits. This was followed in May by a small but informative and attractive exhibition, "The Atom in Britain," supplied by the British Information Services.

The appendix detailing the unusually large additions to the mineral and gem collections represents in no small part the splendid fruits already being born from Dr. Meen's energetic pursuit during his travels of effective new exchange agreements. The Division's share of the Special Provincial Grant was divided between purchase of a faceted golden yellow sapphire of 179.4 carats and purchase of gemstones (not yet catalogued) during Dr. Meen's Burma expedition. Purchases from other funds included two large peridots, a large aquamarine crystal from Brazil, and, selected by Dr. Mandarino from an outstanding private collection offered for sale in Phoenix, many important additions to the mineral collection. More than six hundred specimens were added to the mineral collections during the year, of which thirty-four were species new to the R.O.M., so that more than 70 per cent of all authentic known species are now represented here. The large number of new specimens increases the already imposing coverage of world occurrences of the various minerals.

The importance of exchange programmes will be realized from the fact that new exchanges arranged by the Head during the year were both initiated and had become operative with institutions or individuals in Czechoslovakia (3), Poland (3), U.S.S.R. (3), Hungary (3), Austria (2), The Netherlands and Belgium (one each), and France (3). The first phase of an arrangement with Ivan Franko University in Lvov, U.S.S.R., initiated two years ago, was completed. Initial steps were taken by him to set up exchanges with Japan (5), Republic of Korea (2), Thailand (2), the Union of Burma and India (one each). Obtaining of specimens from any of these regions had previously been most haphazard where it had occurred at all. To the four continuing exchanges long operative with the British Museum of Natural History, the United States National Museum, the American Museum of Natural History, and Harvard University was added a fifth, with the University of Michigan's Department of Mineralogy. Occasional but excellent exchanges are also, of course, made with many other organizations and individuals in North America, Australia, and New Zealand, and, as the appendix shows, the Division's collections have enjoyed the generosity of numerous private and corporate donors.

Field research is of such obvious importance in the building and curating of these collections that it is of particular interest to note the range of study and collecting tours undertaken by members of the Division. Dr. Meen's first journey in the autumn took him not only to the institutions, the dealers, and some important mineral and volcanological sites in western Europe, but also to the U.S.S.R., Poland, Czechoslovakia, and Hungary. While in Switzerland he represented Canada at the sessions of its Museums Commission during the general meeting of the International Mineralogical Association in Zürich. In the spring he made an expedition to the famous but little-studied ruby and jade areas in Burma, where he was able to collect and buy specimens as well as to examine the occurrences of these minerals. En route he visited museums, universities, and geological surveys in India, Thailand, the Republic of Korea, Japan, and Hawaii. While in Seoul he delivered an address at the University to students and government officials, fortunately a few hours in advance of the revolution, with which his remarks are thought to have had no connection. Dr. Tovell studied a number of old mining properties near Sault Ste Marie, where he re-located two deposits of the famous jasper conglomerate, and continued his collecting of specimens from the deformed rocks of the Grenville area. Dr. Mandarino made a collecting trip to Arizona.

Dr. Tovell was the only member of the Division doing regular undergraduate teaching during the year, but all the curatorial staff were heavily engaged in a broader educational effort which in three series of national telecasts provided general introductions to the sciences of geology and mineralogy. Dr. Tovell was organizer and co-ordinator for a C.B.C.-University of Toronto "Live and Learn" series of nine television programmes entitled "Face of the Land" in which he appeared with

Professors Peach, Gorman, Currie, and Deane, and he appeared in an additional programme in C.B.C. Trans-Canada's regular science series. Dr. Meen was guest lecturer for a series of six telecasts on the history and properties of gemstones and did a special telecast on his work in Burma. Dr. Mandarino was the consultant for a four-programme series on mineralogy. In addition, Mr. Hillen did several telecasts in connection with the Poster show. All the senior members of the Division delivered occasional lectures and talks, while as usual much time and thought were given to the junior programme under the devoted leadership of Miss Ward. Fifty-nine children participated in the season-long activities of the mineral and rock groups of the Junior Field Naturalists, in the conduct of which Miss Ward was assisted by Professor Gorman and Mrs. W. H. Bush, while Drs. Tovell and Mandarino and Mr. Cowan lent additional assistance during the annual field trip in May.

Publications—books and articles—are listed in the appendix. Special note may be made of Dr. Meen's book *Quetico Geology*, Mrs. Helen Bush's *Treasures in the Rocks* (published for the Museum by Longmans Green), and of the fact that Dr. Mandarino had the honour to read a paper at the meetings of the Mineralogical Society of America. Each of the curators attended two or more professional meetings in Canada and the United States, and Dr. Meen also was the Canadian representative at meetings in Europe.

Government agencies, universities, and research institutions are making ever greater use of the mineral collections and the reference library. Moreover, the Division is the only agency here which provides an identification service for mineral and rock specimens to the general public. The number of specimens so identified is countless. Other divisions of the Museum have likewise increased their calls for such identification. As contributions towards improving and expanding these services, Dr. Mandarino and Mrs. Crozier have completed revision of the mineral card catalogue so that there is now full cross-indexing of synonyms and varieties with the recognized species' name; Mr. Cowan has started production of a complete set of X-ray patterns for all known mineral species; some progress has been made in rearrangement of the mineral collections to follow the new Dana system; and, at the beginner's level, more than five hundred sets of the "Twelve Ontario Minerals" devised some years ago by Miss Ward were produced by Mr. Teewiss and sold at the R.O.M. Sales Desk. The only cherished project of the Division (and the Museum) where no visible progress was made was that of securing a planetarium; however, a joint faculty-Museum committee was established late in the spring with the blessings of the President to see whether the slow passage from dream to reality could not be accelerated.

Life Sciences

Two major and onerous projects were carried out during the year and both should prove of immense benefit to users of the facilities of the Division. The first consisted of the long overdue centralization of the divisional library, which had previously been scattered irrationally in eleven different places, some of them totally unsupervised, and in considerable part not readily available to persons requiring access to the books and periodicals. Half of the former East Gallery of Invertebrate Fossils was allocated to the new central library. Here all the published holdings of the Division are now properly housed and cared for in a well-lighted area with commodious and comfortable work space for the readers and the librarian and her assistants. The concentrated whole is also now being recatalogued in accordance with the Library of Congress system based on broad phylogenetic categories. The result is an excellent reference library of which we may well be proud. Miss McCormick and the Head of the Division, Dr. Urquhart, deserve great credit for the orderly and expeditious manner in which this operation was carried through.

The second was of great importance in itself and constitutes the prerequisite for the ultimate reorganization of the collections and galleries of the Invertebrate Fossil Department. It consisted of the dismantling of this department's two galleries and

the arrangement of the whole of its research collections into a phylogenetic series. This great task was carried through by Dr. Lemon in the remarkably short time of four months. It had long been recognized that these collections were inadequately arranged and housed for research purposes and that their presentation was so outdated as to render them almost totally uninteresting to the general public. The amount of gallery space devoted to what quite unjustly appeared to be dead storage in public areas had long worried the Museum, but lack of personnel and lack of funds had prevented remedial action, although there was always complete agreement that not only were the palaeozoological collections of very considerable importance for research but that they could potentially become one of the most exciting parts of the Museum to the general public. The fairly recent appointments of two curators in Palaeozoology and the active co-operation of the Head of the University's Department of Geological Sciences, Professor Langford, removed one of the impediments to a start on this programme. The lack of the necessary funds was overcome by the drastic procedure of cutting back for the year on the activities of other departments in the Division. The establishment of separate departments for Vertebrate and Invertebrate Fossils at the beginning of the year had opened the way to setting up two properly equipped research elements, and through very careful planning the Invertebrate Department is now set up not only with all its research collections in orderly phylogenetic study-storage (in the south end of the former East Gallery) but with adjacent study and research rooms for our staff and expanded study and teaching room for our University colleagues and their students. To bridge the time until the show collections can be reorganized on a new and vital basis in a proposed Hall of Evolution, Dr. Lemon prepared a small section for the Education Division and the public in which the models of the more common invertebrate fossils, a selection of invertebrate fossils commonly found in Ontario, and the popular Ordovician diorama may be seen.

A good start was made in the course of these reallocations of space towards bringing the Curator of Herpetology and his research collections into conjunction: they have long been separated from each other by a distance of three floors. It was likewise possible to reorganize, expand, and redecorate the divisional administrative offices and to provide sorely needed storage space for the research collections of birds, these facilities having become intolerably strained with the purchase of the great Munroe Collection two years ago.

The energies of the Display Department were largely concentrated on preparing a portion of the new World Reptile Gallery so that a part of the area so mysteriously hidden behind barriers for the last several years might be opened on July 1, a year or more in advance of the completion of this undertaking. The amount of field collecting, research, and technical preparation lying behind this important project is prodigious, but it is anticipated that the dedication of the finished gallery will be a feature of the 1962 jubilee celebrations. Several small exhibits were arranged in the art alcove, which was the centre of three particularly pleasant events: an evening reception for the dedication of a memorial plaque to Dr. Fleming whose bequest of his great collection of birds and superb ornithological library constitutes a principal cornerstone of the Department of Birds; a reception sponsored by the *Toronto Star Weekly* in honour of the gifted young Canadian bird artist, Fenwick Lansdowne, who was holding his second exhibition in the Museum; and the debut exhibition of a young animal painter, George McLean.

Some thousands of specimens were added to the collections of the various departments through field collecting, gift, or purchase. Notable among them were two previously unrepresented Ontario bird eggs, a tuatara lizard, and twenty-five steel drums of freshwater fishes from Arctic Canada, the largest and most comprehensive collection ever gathered from Canada's Arctic freshwaters. These resulted from the Arctic survey conducted in 1959 by the Fisheries Research Board with the participation of the Museum. The problems of cataloguing, preserving, and storing new research material have grown to such dimensions that advantage must be taken of every stratagem and new technological device to keep abreast. For example, all recording of research data for the Departments of Vertebrate and Invertebrate

Fossils is now being done on I.B.M. punch cards which are self-filing and consolidate all information on single cards in place of the three to five formerly required. No speed-up method has been devised for the preparation of new material for the research collections, but Mr. Taylor was able to prepare 52 study skins and 88 skeletons for this museum and 27 miscellaneous specimens for other institutions, while Mr. Hornell completed the preparation of nearly half the Pleistocene material collected in Peru. Three papers based on the Peruvian expedition have already been published, and the R.O.M.'s lead in this important field of research is now widely recognized. Unfortunately the Museum is to lose the valued services of Mr. Taylor, as he has just been appointed to the directorship of the new Aquarium in Calgary.

Five members of the curatorial staff combined to give the second year Honour Biology course in systematic biology. Dr. Scott presented a graduate course in Ichthyology, Mr. Snyder supervised the research work of a graduate student and presented a seminar lecture to the students in the graduate course on Ecology, while Mr. Baillie presented an extension course in Ornithology. The research, which is at the heart of all the activities of the Division, was pursued on many fronts and a digest of publications will be found in the bibliographical appendix. Substantial progress can be reported in a number of areas. Dr. Peterson is well forward with his major study on the mammals of Eastern Canada and his department is also conducting a taxonomic study of the pocket gopher. The Department of Birds is preoccupied with the preparation of a reference book provisionally entitled *A Manual of Ontario Ornithology*. Mr. Logier has completed and sent to the printer the revision of his standard reference work, the *Check List of the Amphibians and Reptiles of Canada and Alaska*. Dr. Wiggins completed a study of the world species of *phryganiidae* and continued his study of caddisflies. Dr. Lemon is carrying out a study of the Peruvian tar seeps material with special reference to the raised beaches and its associated invertebrate fauna. Dr. Edmund and Mr. Hornell are busily engaged in preparing the vertebrate Peruvian material for research and Dr. Edmund has already reported upon some of it. He was honoured by having his paper on tooth replacement in the lower tetrapods read before the Royal Society of Canada and his monograph on tooth replacement in the lower vertebrates is at the printer. The Department of Fishes in addition to its primary research in the freshwater fishes of Canada engaged in a series of short-term research projects on the family *Esocidae*. All the curators participated in the work of the Caribbean Committee which has been reported on elsewhere.

The Division has entertained during the year visiting colleagues and research workers from twenty-eight institutions in North America and Europe and six of its own curators attended professional meetings in the United States or elsewhere in Canada. Specimens were sent on loan to or exchanged with sixty-two institutions, a large volume of correspondence was maintained, and a thousand pages of new manuscript were prepared. Some of these diverse activities could not have been carried through had the Division not, as elsewhere in the Museum, had its own share of devoted volunteer helpers, drawn principally from the Federation of Ontario Naturalists and the Women Members' Committee.

Education

This always busy Division, which provides the primary apparatus for direct interpretation of the Museum's collections and activities to our organized visitors, both junior and adult, again found its resources stretched to their limits and at certain seasons it was unable to satisfy the full volume of requests for its teaching services. Such refusals are viewed with great regret, but if our guests are to leave the Museum with a feeling that they have in some degree received a real addition to their education rather than mere instruction, no extension of present facilities can be contrived unless both the staff and the building can be expanded. The traffic has reached the saturation point. This is not to say that the adventurous and experimental spirit of the teaching staff has suffered the slightest atrophy.

In fact its unique activity in taking the Museum to the schoolchildren in distant parts of the province this year took one of our teachers to the remotest areas yet reached by this programme, the shores of James Bay. The complicated arrangements to get Miss Bolland, her exhibit cases, films, and projector to her audience involved the co-operation of the Department of Education, the Regional Inspector of Indian Schools and the various paper, pulp and power companies. She was able to reach 2,771 children and adults in Cochrane, Island Falls, Smoky Falls, Otter Rapids, Fraserdale-Abitibi Canyon, Moosonee, and Moose Factory. The elementary and secondary schools of parts of Thunder Bay were visited in January. Miss Martin visited the secondary schools of Fort William, Port Arthur, Dryden, and Kenora and came back with an answer to one aspect of the problem of how to satisfy the perennial plea that the Museum expand the visiting programme. Miss Cumming and Miss Fitz-Gibbon taught in Fort William, Port Arthur, Hornepayne, Geraldton, and Nipigon after penetrating for the first time remote settlements on the east and north shore of Lake Superior. This route, undertaken at the urgent request of the Inspector, brought the teachers and their programme to children some of whom had never been more than fifteen miles from home, whose familiarity with such things as television and automobiles was most limited, and who had experienced almost no communication with the outside world. The programme this year reached a total of 10,048 primary and secondary school pupils and two new travelling cases were added to the fifteen circulated to schools not receiving personal visits from a museum teacher. Since this important programme cannot at present be expanded without damage to the quality of the instruction offered, it is felt that the local museums which are springing up in many areas should begin to share some part of the burden of providing a museum experience to the children of the distant schools. The rate of population growth, inadequate information about cultural trends in old and new communities, and sheer distance are all factors against which our battle is fought with diminishing success.

The normal routine of visits to the Museum by school classes from Metropolitan Toronto and the Province as well as one New York school which visits regularly from near Buffalo was conducted with no unusual events, and requires only the notation that the current load could not be carried without the valued assistance of our occasional teachers. The rhythm was varied occasionally for the regular staff by several specific projects with individual classes or schools, such as the Sunnyview School for handicapped children.

The lists for the popular Saturday Morning Club were, as always, regretfully closed during the first few hours of registration and its activities were thoroughly enjoyed by 200 children. Thanks to an increase in the Metropolitan Council's grant towards the costs of this programme, it will be possible to increase the registration next season. An innovation this year was the organization of a Children's Council to voice suggestions for additions or changes in the programme. The Council entertained the group leaders at the end of the season with a luncheon prepared by the children themselves. The ingenuity, creativeness, and love of children which so characterize Miss Eugenia Berlin remain the chief inspiration for one of the Museum's most rewarding activities. During the summer a special film programme co-ordinated with the Museum collections was organized for individuals or summer recreation groups wishing to attend. Its fifteen showings drew over 1,600 participants, principally children. The experiment on the use of films in a unique setting was so successful that the Canadian Film Council has circulated a special report on it throughout the country as a part of the preparatory study towards the foundation of the Canadian Centre for Films for Children. Miss Martin's experience was of invaluable assistance in this project. Rehabilitation of the Museum theatre prevented repetition of the pilot project during the summer of 1960, but it will be resumed at a later date.

A number of special events were arranged during the year. During the toy show a Christmas party was given with members of the Art and Archaeology Division for the children from Bloorview Hospital and at Easter a "Bunny Party" for the children and grandchildren of Museum members. Both parties were huge successes and the latter is likely to become an annual tradition. To honour the centenary of the Ontario

Educational Association in the spring, the Division organized an exhibit of school registers, reports, and textbooks of the 1850's and dressed it with four costumed figures, a school bell, a globe and other period pieces lent by the Jordan Museum of the Twenty. In May was held the annual Shakespeare Day programme for secondary school students, during which there was a special display of Stratford Festival costumes and Mrs. A. M. Bell spoke on the behind-the-scenes problems of the Festival design department.

A regular part of the Division's duties is to give aid both through direct teaching and as advisers in the relevant aspects of teacher training and in-training. Such assistance was given to the Teachers' Training Colleges of Toronto, Hamilton, and Peterborough, to the Ontario College of Art, and to the Department of Education for its summer course in Audio-Visual Aids. A special meeting was arranged between the Toronto Elementary School Science Association and members of our Education, Earth, and Life Sciences Divisions to discover how teachers could make better use of the facilities of the Museum. One result of the conference is that sets of rocks and minerals, selected by the Earth Sciences Division, are being placed in all Toronto senior schools.

Three types of programmes were offered during the year to adults, three Extension courses, a series of Saturday afternoon Gallery Talks, and Sunday films. Mr. F. St. G. Spendlove gave the eight-lecture course on English Pottery and Porcelain, while guest speakers carried the other two courses, one on Preserving Ontario History, the other on Travelling to Countries Far Away. The latter popular series was this year devoted to Asia and East Africa. The gallery talks, keyed to the subject-matter of the travel series but open to anyone interested, were a successful innovation which it is hoped to continue. The Sunday film programme, built around the theme of "Peoples in a Changing World" drew 4,784 people, which meant that each showing had a capacity audience and there were always disappointed persons who had to be turned away. On the final Sunday an experimental free ticket system was tried and will be used again next year. The adult programme is one of the Museum's most valuable services and is very ably conducted by Miss Ella Martin as an added responsibility to her regular teaching. It is felt, however, that we can and should do much more in the way of direct teaching help to our adult visitors, but no expansion of the existing programme is thinkable until we can afford a full-time co-ordinator for adult education and can devise the means for giving her adequate teaching and clerical help, whether professional or volunteer.

The aim of the members of Education Division is constantly to improve their own knowledge and ability to convey both the content and the excitement of learning. The steadily increasing demands of schools seeking its teaching services tend to create pressures which result in denial of ideal conditions for carrying out their mission. They remain firm in their resolve to maintain the quality of their instruction against all demands for sheer quantity, to hold a reasonable balance between exceptional programmes and the basic schedule, and to permit no chink in their armour against automation.

Office of Information Services

The fourth year of this Office's operations and its second with full staff found a stable operation during which the seeds of various of its early innovations were bearing abundant harvest and the logic of its services was fully accepted. Important internal developments included the acceptance by the Board and all Divisions of a policy and procedure for public relations activities, and of regulations for the design and production of all categories of printing; the completion of the analyses and interpretations of the 1958-9 visitor survey and the publication of the first two papers based on it in the new "Reports from Information Services" series; the design, survey, and analysis for studies of the frequent visitor, the Museum's image of its public, the characteristics of the Museum's film programme audience, etc.; the setting in the graphic design programme of new and successful styles for the Art and Archaeology

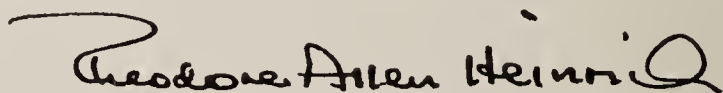
• *Annual* and Occasional Papers, the R.O.M. Annual Report, Reports from Information Services, and R.O.M. business forms and stationery. National and international awards for graphic excellence are mentioned elsewhere.

The Museum's television, press, and radio policy was also formalized during the year and it became a member of the University of Toronto Television Committee and the Metropolitan Educational Television Association of Toronto, with Mr. Cameron serving as its representative as a member of the former and on the executive of the latter. Incomplete figures (exclusive of June) showed that news coverage of Museum activities amounted to 392 stories and 125 pictures for 1,280 column inches of space in the Toronto papers and 613 stories and 238 pictures for 1,408 column inches of space in other Canadian newspapers. The Museum participated during the same period in 87 television programmes for a total of 1,147 minutes "on camera" and 61 radio programmes with 478 minutes "on air."

The majority of television projects were carefully planned series, rather than the usual "spot" appearances, and exceeded those of all previous years for both quality and quantity. The thirteen-week series "Who Knows," a Museum quiz game, was a notably successful experiment made in co-operation with C.B.C., which developed an enormous following, and all participating departments were most grateful to Miss Daphne Webb for her patient, efficient activities as co-ordinator in this taxing effort. The science series have been mentioned in the section of this report dealing with the Earth Sciences Division. C.B.C.-French Network also filmed two series in the Museum, and there was an immediately noticeable upsurge of visitors from Quebec. Radio activity included the regular Friday morning broadcasts on CJBC and a record number of taped programmes made at the Museum.

The Office of Information Services initiated and carried through two special projects during the year, the visitor programme at the Miller Site and the Caribbean Research programme. Visitors were encouraged to inspect the excavation of the pre-historic Indian Village at the Miller Site, in Pickering Township, and guides were trained to take them through it: over 18,000 took advantage of this opportunity between July 1 and September 15, 1959, and the service will be repeated during the summer of 1960. The O.I.S. provided considerable financial and administrative assistance to the field party as well as operating the visitor programme; it has been able to assist several Museum departments in obtaining funds for special projects and for the Miller Site Excavation was able to secure two grants for a total of \$7,000 from Imperial Oil Limited, as well as loans of vehicles and equipment from business and government agencies. The Caribbean Research Project was undertaken as the essential groundwork through which the R.O.M. might obtain support for various proposals of interest to it in the Caribbean area. The results are not yet known, but the study carried out through the year by two large curatorial committees under the chairmanship of Dr. Peterson and Mr. Cameron completed a basic and comprehensive study which represents the most thorough effort of inter-divisional co-operation in the history of the Museum.

Mr. Cameron read the principal and much-commented-upon paper at the Public Relations session of the American Association of Museums' annual meeting in Boston and was of great assistance to the Director in the arrangements for a session on dissemination of the museum message at the meeting of the Canadian Museums Association in Montreal.

Theodore Allen Heinrich

Art and Archaeology Division

Gifts and Bequests

- Chinese furniture. Desk, Ht. 2' 9", W. 5' 2", depth 2' 1"; pair of chairs, Ht. 3'. Gift of Mrs. Edgar Stone.
- Two paintings and one woodblock print by Munakata. Gift of Mr. M. Nishigaki, Kyoto.
- Woodblock print by Saito. Gift of Mr. J. Mayuyama, Tokyo.
- Chinese marriage rug. Gift of the Estate of Mrs. H. D. Warren.
- Totem pole from Australia. Ht. 46". Gift of Mr. R. W. Finlayson.
- Sepik River skull, New Guinea. Gift of Mr. R. W. Finlayson.
- Wooden antelope headdress, Bambara. Ht. 52". Gift of Mr. S. J. Zacks.
- Inscribed wooden statue of a man, Egyptian, 12th Dynasty, about 1900 B.C. Ht. of figure 16 1/8". Anonymous gift.
- Head of a priest, granite, Egyptian, 4th century B.C. Ht. 3 1/2". Anonymous gift.
- Head of a man in high relief, volcanic stone, Persian, probably Parthian period. Length from chin to top of head 5". Anonymous gift.
- Silver tankard, English, London, 1795. Ht. 7 1/2". Estate of E. R. Rolph.
- Handwoven coverlet, Pennsylvania, 19th century. 9' 2 1/4" x 5' 10 3/4". Gift of Mrs. Stewart Brown.
- Collection of costume. Gift of Lady Eaton.
- Collection of 18th and 19th century costume. Gift of Miss Joan Arnoldi.
- Collection of 20th century costume. Gift of Mrs. F. W. Trusler.
- Short evening dress, spring 1958. Gift of Holt Renfrew Limited.
- Wool dress about 1839. Gift of Mrs. d'Arcy Leonard.
- Dress designed by Rouf with matching hat, 1908. Gift of Mrs. D. S. Stayner.
- Wool dress with coat lined with silver fox, English, 1957. Gift of Ronald Paterson, Inc.
- Evening cloak by Worth, 1908. Anonymous gift.
- Woman's costume, Yugoslavia, Zagreb district, late 19th century. Gift of Mrs. Edgar Stone.
- Group of men's fashion plates, 1851-71. Warren K. Cook Collection. Gift of Cook Clothing.
- Forty pieces of early Canadian glass from Nova Scotia, Ontario and Quebec. Gift of Dr. Lorne Pierce.
- Large Orrefors vase by Nils Landbert. Gift of Mr. Johan Bayer.
- Desk chair, Queen Anne. Gift of Mrs. W. D. Ross.
- Tea or hot-water urn, London 1809, by Paul Storr, and other examples of English 18th and 19th century silver; set of 4 English glasses, perhaps 18th century. Gift of Mrs. F. N. G. Starr.
- Tea and coffee set of 9 pieces, Chinese export porcelain, first half 19th century. Gift of Miss Frances Loring.
- Two tea bowls, Worcester type, 1775-1800. Gift of Dr. Lorne Pierce.
- Two pistols, two coach guns, and two "Patent Model" powder testers, all the work of John Gurd, London, Ontario. Gift of Mr. J. Harold Crang.
- Moulded pottery bowl by Pablo Picasso, mid-20th century. Gift of Mr. and Mrs. A. Varga.
- Pair of gilt wood gueridons, French, probably 18th century. Gift of Mr. Herbert Irvine.
- Collection of costume. Gift of Mrs. Helen Aikin Ney.
- Collection of 19th and 20th century costume. Gift of Mrs. Percy Band.
- Honiton lace flounce. Gift of Mrs. F. W. Cowan.
- Chinese theatrical robe. Gift of Mrs. George G. R. Harris.
- Wedding dress and slippers, Canadian, c. 1885. Gift of Miss Aileen Robertson.
- Collection of costume, English, 18th century. Gift of Mrs. J. C. Forsyth.
- Calverley collection of Roumanian weaving and embroidery; Greek, Cretan and other weaving; English, Turkish, Persian and other embroideries. Bequest of Miss Amice Mary Calverley.
- Evening dress, English 19th century. Gift of Mrs. Eric Duke Scott.
- Collection of 20th century costume. Gift of Mrs. F. C. Ryan.
- Afternoon dress, English, 1853. Gift of Mrs. Hugh McKanday.
- Evening dress, English, 1892. Gift of Miss Helen LeVesconte.
- Wedding dress, slippers and gloves, 19th century. Gift of Mrs. A. H. Martens.
- Collection of men's 19th century costume. Gift of Mrs. R. W. Hart.
- Two dupatta, Indian, late 19th century. Gift of Miss Alice Boney.
- Piece of chainstitch embroidery, Indian, late 17th-early 18th century. Gift of Roger Warner, Esq.
- Collection of 18th and 19th century costume. Gift of Mrs. B. W. Horan.
- Collection of West African weaving and costume. Gift of Mr. Justice L. Brett.

Handwoven coverlet, Ontario, 19th century. Gift of Arts & Crafts of Georgetown.
 Pink silk velvet robe, worn by Queen Alexandra, probably made in Paris. Gift of Miss O. D. Dahlgren.
 Wool dress, Canadian, late 1850's. Gift of Mr. Arthur Hunt.
 Collection of men's costume, Canadian, 1900-1914. Gift of Mrs. W. O. Moore Ede.
 Collection of Japanese costume and textiles and southeast Asian textiles. Gift of Mrs. Edgar J. Stone.
 Plate, glazed pottery, Persian, 16th-17th century. Gift of Miss Helen Norton.
 Tabouret, glazed pottery, Mesopotamian, 12th-13th century. Gift of Miss Helen Norton.
 Nine glass flasks, Roman. Gift of Mr. Desmond Fitzgerald.
 Three gilt hairpins, Sung Dynasty, China. Gift of Mrs. Edgar J. Stone.
 Gold comb head, T'ang Dynasty, China. Gift of Mrs. Edgar J. Stone.
 Archaeological material, Japan. Gift of Mr. Roy Cole.
 Two writing sets by Shibata Zeshin, 19th century, Japan. Gift of Mr. Edgar Stone in memory of his father, Charles Edgar Stone.
 Satsuma ware bowl, 19th century, Japan. Gift of Miss Elizabeth Smith in memory of the late Miss H. Smith.
 Collection of Huron Indian material. Gift of the estate of J. Fred Mutrie.
 Spear point, probably archaic. Gift of Mr. Arnold Belanger.
 Embroidered vest of deerskin. Gift of Mrs. H. L. Fanshaw.
 Three woven bags from British Columbia. Gift of Mr. C. S. Band.
 Sculptured figure, Dogon, Ht. 29½". Mask, Dogon, Ht. 19½". Marionette, Ibo, Ht. 24", with handle 32". Gift of Mr. S. J. Zacks.
 Spear point. Gift of Mr. R. Houska, through W. Kenyon.
 Water cooler, gown and cap, Akwata cloth. Gift of Mr. Justice L. Brett.
 African finger ring. Gift of Mr. E. O. Ormsby.
 Spear point. Gift of Mr. Walter Kenyon.
 Two miniature masks, ladle. Gift of Mrs. Sadie Jamieson.
 Twelve baskets of stone artifacts. Gift of Mr. Richard F. Newman.
 African and other materials. Gift of the Harris heirs, London, Ont.

Gifts of Dr. Sigmund Samuel include the following:

Water-colours and drawings: Southeast view of Port Talbot, unidentified artist, early 19th century; View of Bytown, 1837, W. F. Friend; A Toboggan Race near Montreal, Mrs. F. A. Hopkins, 1860; View of Ottawa, Mrs. F. A. Hopkins, c. 1867; two sepia drawings of Toronto, W. H. Bartlett; View of the Place d'Armes, Quebec, R. A. Sproule, 1830; View near Montreal by James Duncan, c. 1860; two sketch-books by Edwin Whitefield, c. 1860; Ruins of Donaganna's Hotel, Montreal; Falls of Montmorency; Montreal from the Mountain, about 1860; Toronto Station, Grand Trunk Railway, by William Armstrong, gift of Gooderham & Worts to Dr. Samuel; 2 Patley sepia sketches of Halifax; View of Quebec by Lt. J. Musgrave, C.E.; water-colour of Canada by Marmaduke Matthews; portrait of Lt. General H. W. Barnard, C. in C. Quebec; eight pencil drawings by C. E. Wiggin, 1841.

Oil Paintings: Three landscapes by Kriehoff.

Prints: 11 lithographs from newspapers; pair of lithographs "Canadian Sledge Club"; lithograph: Views of principal cities on the line of the Grand Trunk Railway; lithograph: Sleighing in Canada; set of 11 lithographs of Arctic exploration, by Commander W. W. May, R.N.; 2 prints from the Richard Short Quebec set, 1760; lithograph: City of Ottawa, Canada West, Sarony, Major & Knapp; two prints of Canada by Fisher and Edy, 1796; six prints of Red River, Jones after Rindisbecker, 1828; sheet of uncut paper currency, Champlain and St. Lawrence Railroad, 1837; mezzotint of New Brunswick coast by unidentified artist, about 1860; portrait of Paul Sandby, R.A., in mezzotint.

Maps: Plan of the Town of Halifax and the Harbour of Chebucto; Plan of the Battle fought 28th April, 1760, upon the Plains of Abraham; Cordiform map of the world by Peter Apan, 1520; "La Figure du Monde Universel," 1580; Carte Générale de Canada, by Baron Lahontan; manuscript plan and elevation of the first eight locks of the Rideau Canal, Ottawa, by Col. John By, 1827; map of Maryland, 1671; 16 early maps of Canada and North America, 1562-1700.

Books: Father du Creus, *Historiae Canadensis*, Paris, 1664; Ferdinando Georges, *America Painted to the Life*, 1658; Baron Lahontan's *New Voyages to North America*, 1735; reprint edition of Reuben Gold Thwaites' *Jesuit Relations*, 35 double volumes; Text of the *Treaty of Paris*, 1762; Neptune America-Septentrional, about 1780.

Portrait of Charles Fothergill, King's Printer and naturalist, attributed to Paul Kane. Gift of the Hon. Mr. Justice McGillivray.

Five small prints after W. H. Bartlett. Gift of Mr. W. F. Hickly.

Historical Atlas of the County of York. Gift of Mrs. Norah Nash Hall.

Ivory ship model, 18th century. Gift of Mr. C. S. Band.

Pressed glass goblet. Gift of Mme. Claire Bertrand.

Wedgwood cream-ware pitcher, with printed design of "The Death of Wolfe" by Benjamin West. Gift of Josiah Wedgwood & Sons (Canada) Ltd.

Exchanges

Bronze mirror, Persian, *c.* A.D. 1300. Diam. $4\frac{3}{16}$ ".
Satin pin cushion, English, 1664.

Contributions

Ivory carvings, cycladic seals, pottery, iron and bronze objects, figurines, etc. from 1958 excavations at Nimrud, of the British School of Archaeology in Iraq.
Twelve stone objects from Jericho excavations.

Collected by Staff Members

Collection of archaeological material from Rainy River, and many photographs.
Medicine man's bag and birch bark scroll, from Rainy River.
Collection of archaeological material from the Miller site at Pickering, and photographs.
Collection of archaeological material from Serpent Mounds, and many photographs.
Collection of ethnological material from Round Lake.
Collection of reproductions of rock paintings, the result of three months' field work in collaboration with the Quetico Foundation, the Ontario Department of Lands and Forests; and the Research Center, Ely, Minnesota; the Museum shares the ownership of the reproductions with these three bodies.

Purchases

Bronze altarpiece, T'ang Dynasty. Ht. $12\frac{1}{8}$ ".
"Gibbons," hanging scroll by Shugetsu (died *c.* 1510). Japanese. $42\frac{1}{2}$ " \times $20\frac{1}{4}$ ". The Reuben Wells Leonard Fund.
Specck collection of Naskapi ethnological material.
Thirteen ceramic figures and pottery, pre-Columbian Mexico.
Spear, Dutch New Guinea. L. $10' 1"$.
Ladle, Igorot tribe, Philippine Islands. L. $32\frac{1}{4}"$.
Mask, Maprik, New Guinea. L. $22"$, W. $10"$.
"Janus-headed" mask, Ogowe River, Gabun. Ht. $24"$, L. $9"$, D. $10"$.
Ancestral figure, Asmat, Dutch New Guinea. Ht. $2' 3\frac{1}{4}"$.
Door, Dogon, Sudan. Ht. $3' \frac{1}{2}"$, W. $1' 9"$.
Figure, Maprik, New Guinea. Ht. $3' 10"$.
Carved figure, Sepik River, New Guinea. Ht. $3' 10"$.
Guro mask, Nigeria. Ht. $30\frac{1}{2}"$, W. $11\frac{1}{2}"$.
Wooden figure with upraised arms. Bandiagara region, French Sudan. Dogon. Ht. (cut off at waist) $4'$.
Horse and rider, Dogon. Ht. $2' 2\frac{1}{4}"$.
Eskimo whalebone mask, Alaska. Ht. $7\frac{1}{2}"$.
Wooden figure, French Sudan, Dogon. Ht. $1' 1\frac{3}{4}"$.
Figure carved in volcanic stone, Marquesas Islands. Ht. $6\frac{1}{2}"$.
Tam-tam drum, Baga. Ht. $5' 6"$, Diam. $1' 7"$ (at top).
Mask, Senufo. Ht. $24\frac{1}{2}"$, W. $9\frac{1}{4}"$.
Nalindele mask and costume, life size. Northern Rhodesia.
Wooden drum, African. Ht. $21\frac{3}{4}"$, Diam. $10\frac{1}{4}"$.
Hide drum, African. Ht. $14\frac{1}{4}"$, Diam. $13"$.
Wooden spoon, Tami Islands. L. $29\frac{1}{2}"$.
Mitre mask, Rorowe, Cameroons. Ht. $19\frac{1}{2}" \times$ W. $7\frac{1}{2}"$.
Mask, Bwiti, Ogowe River, Fang Territory, Gabun. Ht. $11"$, W. $6"$.
Elephant mask, Bambara, French West Africa. L. $37\frac{1}{2}"$, Ht. $13\frac{1}{2}"$.

Oulé mask, Bobo, French West Africa. Ht. 17", W. 7".
 Dance mask, Bakuba, Kasai area, Belgian Congo. Ht. 17½", W. 9½".
 Poro Secret Society mask, Dan, Ivory Coast. Ht. 9¼", W. 5¼".
 Helmet mask, Senufo, French Sudan. Ht. 33½", W. 8½".
 Mask, Yoruba, Nigeria. Ht. 16½", W. 7¼".
 Mask, Baoulé, Ivory Coast. Ht. 9", W. 4½".
 Antelope mask, Dogon, French Sudan. Ht. 19½", W. 6¼".
 Dance mask, Mossi, Haute Volta, Ivory Coast. Ht. 6', W. 7¼".
 Mask, Dogon, French Sudan. L. 13' 1", W. 8".
 Wooden ceremonial staff, pre-Columbian Peru. Ht. 18½", W. 1¾".
 Relief sculpture, Egyptian, 14th century B.C. With profile portrait of Nefertiti. Ht. 8", W. 18½".
 Stucco figure, Persian, 12th–13th century A.D. Ht. 13".
 Curtius collection of Greek and Roman objects, consisting of sculpture, pottery, etc.
 Bronze couch (27 fragments; when restored it will make a bed of average length).
 Roman mosaic of a cockerel. 18¼" × 20¼".
 Böttger pilgrim bottle, Meissen, 1710–20. Ht. 6", Diam. at base 1¾" × 2¾".
 Silver-gilt book attachment, North Italian, 1475–1525. Ht. (a) 17⁄8", (b) 3½", (c) 1¾".
 Two stained glass panels, South German (?), c. 1530 (?). 18½" × 25½"; 20¼" × 25".
 Stone figure, "St. George and the Dragon." Burgundian, 15th century.
 Terracotta bust, thought to be of François Duquesnoy "Il Fiammingo," signed and dated "Mich. Rysbrack, 1743." Ht. 23½".
 Eighteen-piece porcelain coffee service, English, Lowestoft, 18th century.
 Glass wine jug, Italy, Venice, c. 1550. Ht. 6¾", Diam. at rim 4⁹⁄₁₆", at foot 4¾".
 Terracotta medallion-bust of Oliver Cromwell by Louis François Roubiliac, English, c. 1750. Diam. without frame 10¼".
 Embroidered hanging, Bengal, 17th century. 7' 10" × 3' 9".
 Crewel work curtain, English, late 17th century. 6' 10" × 5' 5".
 Collection of 18th century paste buckles and of late 18th century and 19th century rings.
 Mahogany card table, Canadian, about 1830–40.
 Regency armchair in mixed woods, French, about 1725.
 White marble bust of William Pitt the Younger, by Jospeh Nollekens, 1737–1823.
 Silver porringer, London 1712, by either John East or Paul Lamerie.
 Pieces from a Russian porcelain tea service, marked Gardner, Russia, late 18th century.
 Venetian glass dishholder on foot, c. 1550.
 Irish glass pedestal vase, perhaps Waterford, early 19th century.
 Upholstered wing chair, English, c. 1730.
 Walnut hall closet, French, 17th century.
 Hanau plate with blue and white decoration.
 Pair of jardinières, Nantes, c. 1755; plates representing factories of Lunéville, Strasbourg, Nevers and Sceaux.
 English japanned cabinet on silvered base, c. 1680. Measurements: chest 41½" × 33"; stand 43½" × 19".
 Madonna and Child, polychromed wood, by Jacopo Sansovino (1486–1570). Ht. 38½".
 Flowered Indian chintz, 18th century.
 Embroidered curtain, English, late 17th century, 6' 10" × 5' 5".
 Handwoven coverlet, Pennsylvania, 19th century. 7' 11¼" × 6' 1½".
 Handwoven coverlet, Pennsylvania, 19th century. 7' 11¾" × 6' 4¾".
 Embroidered wall hanging, English, 18th century. 8' 8" × 9".
 Handwoven coverlet, Ontario, Oxford County, 19th century. 7' 4" × 4' 7½".
 Handwoven coverlet, Ontario, Guelph District, 19th century. 6' 6" × 5' 6½" *ex* fringe.
 Two cashmere shawls, India, 18th century and 19th century.
 Two embroidered purses, French, 17–18th centuries.
 Collection of Indonesian weaving, early 20th century.
 Collection of men's costume, English, 19th century.
 Collection of Norwegian weaving, 1958.
 Handwoven blanket of handspun wool, Norway, 1959.
 Seat cover of painted and resist-dyed cotton, Indian, 18th century.
 Collection of costume, English, 18th and 19th centuries.
 Olive green velvet aesthetic dress, English, c. 1895; girl's formal evening dress of about 1857 from design by Worth; two-piece dress, Indian handpainted and resist-dyed glazed cotton, French, 18th century; man's housegown, painted and resist-dyed cotton, 18th century; ball dress of satin and Chantilly lace, 19th century; pair of women's shoes, English, c. 1700; brocaded Spitalfields silk dress, English, 1750–60; 2 dresses, silk, English, c. 1770. Bead purse, English, dated 1632, 3¾" × 4¼"; Caraco jacket of printed cotton, French, about 1785. Holt Renfrew Fashion Fund.
 Rigid heddle (Bandsked) and suttle of reindeer horn, Sweden, 1959.
 Collection of costume for christenings, English, 17th and 18th centuries.
 Collection of Indonesian textiles, 19th and 20th centuries.
 Collection of Indonesian textiles, 19th and 20th centuries.
 Woven textile, Bolivia, 17th century.

Dalmatic, crimson pile-on-pile velvet, Spanish, first half 16th century.
 Persian polychrome velvet with gold ground showing 4 female figures, early 17th century.
 30" × 7".
 Bronze double figure representing a divine pair, Syrian, about 900 B.C.
 Clay alabastron, Late Minoan IB-Late Minoan II, 15th century B.C.
 Stemmed two-handled goblet, Mycenaean, about 1300 B.C.
 Two red-polished knob-lug bowls, Early Cypriote III, about 2000 B.C.
 Terracotta idol, Middle Cypriote, about 1750 B.C.
 Porcelain stem-cup, Ch'ing-pai ware, Sung Dynasty, China. Purchased in memory of the
 late Canon Henry John Cody.
 Pottery ewer, Liao Dynasty, China.
 Swatow porcelain dish, late Ming Dynasty, China.
 Buddhist hanging scroll of Taima Mandara, Kamakura period, Japan.
 Porcelain vase, Kakiemon ware, Japan, late 17th century.
 Porcelain dish, Nabeshima ware, Japan, early 18th century.
 Sandstone fragment, Mathura school, India, 1st-2nd century. A.D. Ht. 13¾"
 Chinese limestone figure of a squatting demon from Hsiang-t'ang Shan cave temples, Honan
 Province, Northern Ch'i Dynasty, 550-577.
 Wooden figure of Jizo Bosatsu from Kofukuji Temple, Nara, Japan, 1st quarter of 10th
 century.
 Skin jacket, Naskapi, Labrador.
 Benin Head, Nigeria. Ht. 17½".
 Carved ivory tusk, Bini. L. 2' 7".
 Eskimo carving. Ht. 8".
 Three clay objects from the State of Chiapas, Mexico.
 Indian skirt, British Columbia.
 Three beaded belts, Plains.
 Bark cloth, Peruvian.
 Collection of pre-Columbian material.
 Aztec incised bone rattle. 30.5 cm.
 Mahogany grandfather clock, made in Quebec about 1800.
 Brass compass, given by General Brock to Tecumseh.

Gifts

Native copper boulder, Beachville, Ontario, by Cyanamid of Canada Limited.
Native copper, Rudabanya, Borsod Negye, Hungary, by Joseph Bodnar, Toronto.
Molybdenite, William Lake, British Columbia, by Professor P. A. Peach, Toronto.
Concretion, locality unknown, by Fred Williams, Port Credit.
Cinnabar, and cinnabar with stibnite, Red Devil Mine, Red Devil, Alaska; bertrandite, and beryl, Boomer, Colorado: by Professor D. H. Gorman, Toronto.
Cassiterite, South Crofty Mine, Cornwall, England, by Gavin Henderson, Toronto.
Natural Pb₅As₆S₁₄ Glass, Cerro de Pasco, Peru, by G. C. Amstutz, Rolla, Missouri.
Cinnabar, Pinchi Lake, British Columbia; sulphur, Rotorua, New Zealand; tar sand, Fort Mackay, Athabasca River, Alberta; gold high-grade, Old Diamond Mine, Madoc Township, Ontario: by D. E. Craigie, Toronto.
Uraninite crystal, Fission Mine, Ontario, by George K. Monteith.
Hydrocarbon, Nordic Mine, Elliot Lake, Ontario, by Frank H. Mylrea, Elliot Lake.
Native copper, Houghton, Michigan; crystallized copper, Bisbee, Arizona: by Andre Dorfman, Toronto.
Zircon; pyrochlore; pan concentrates of pyrochlore; from Blue River, British Columbia; pyrochlore in matrix, Verity Claim, British Columbia: by O. E. French, Blue River, British Columbia.
Pyrite concretion, Temagami, Ontario, by W. Chantler, Toronto.
Beta-uranophane, Faraday Uranium Mines Limited, Ontario, by E. T. Kelsey, Toronto.
Native copper, Sulman Lake, Labrador, by Frobisher Limited, Toronto.
Chrysocolla, El Colbre, Cuba, by Otto Grathwohl, Toronto.
Native gold, Cochenour Willans Gold Mines, Limited, Ontario, by the Company.
Rhodonite, Ural Mountains, and lapis lazuli, Siberia, U.S.S.R., by the Academy of Sciences, Moscow.
Meteorite (Siderite), fall of Feb. 12, 1947, Sikhote-Alin Mountains, Eastern Siberia, by Professor E. Krinov, Academy of Sciences, Moscow.
Agate, Brazil, by Hans Caesar, Idar-Oberstein, Germany.
Siderite, Geco Mines, Ontario, by Dr. W. L. Brown, Toronto.
Rutile, Kozolody, Bohemia, Czechoslovakia, by J. Vtelensky, Kutna Hora, Czechoslovakia.
Cenosite, Bicroft Uranium Mine, Bancroft, Ontario, by the Company.
Apophyllite, and Kyanite, Rio Grande do Sul, Minas Geraes, Brazil, by Martin L. Ehrmann, Los Angeles.
Flint, Flint Ridge, Ohio, by W. Renison, Royal Ontario Museum, Toronto.
Cordierite, and siderite, Manitouwadge, Ontario, by R. C. E. Bray, Manitouwadge, Ontario.
Pollucite, Bernic Lake, Manitoba, by Dr. G. A. McCartney, Toronto.
Spessartite, Virginia, by Captain John Sinkankas, Washington, D.C.
Nicolite, Sudbury, Ontario, by Robert White, Port Colborne, Ontario.
Specimens showing slickensides, Cobalt, Ontario, by Dr. Robert Thomson, Cobalt, Ontario.

Important Exchanges

Pyrrhotite crystals, Blue Bell Mine, Riondell, British Columbia, with Professor R. M. Thompson, University of British Columbia.
Twenty-eight specimens of minerals from Western Australia, with the Government Chemical Laboratories, Perth, Western Australia.
Specimens of pink muscovite with associated minerals from Harding Mine, Dixon, New Mexico, with Professor Arthur Montgomery, Easton, Pennsylvania.
Pyrrhotite crystals, Stanleigh Mine; and pyrrhotite crystals, Nordic Mine, Elliot Lake, Ontario: with John R. Collins, Elliot Lake, Ontario.
Forty-three specimens from various locations, with the American Museum of Natural History.
Ten specimens from various locations, with the British Museum of Natural History, London, England.
Tourmaline crystals; and acmite in barite; from Quebec; foresterite, Notre Dame du Laus, Quebec: with Dr. D. D. Hogarth, Ottawa.
Calcite geode, Utah, with A. L. Clark, Toronto.
Five specimens from U.S.S.R., with Ivan Franko State University, Lvov, U.S.S.R.

Lepidolite, Portland, and stilbite, Thomaston, Connecticut; serpentine, Portchester, New York, with DeWitt Lambden.
 Eleven specimens from Hungary, with Professor Sander Koch, Szeged University, Szeged, Hungary.
 Beryl, variety goshenite, with S. Shalovetz, Los Angeles.
 Kunzite, Pala, California, with Filer's, Redlands, California.
 Manganocalcite; braunite; parsettensite; tinzenite; and rhodonite from Val d'Err Alp, Parsettens, Switzerland: with Dr. Th. Geiger, Oberwinterthur, Switzerland.
 Asbestos, East Broughton, Quebec; limonite pseudomorphs after pyrite, Neffsville, Pennsylvania: with North Museum, Franklin and Marshall College, Lancaster, Pennsylvania.
 Gypsum crystals, Oklahoma; fluorapatite, triphyllite, scorzalite, barbosalite, vivianite, tavorite, hureaulite, and rockbridgeite, South Dakota; barite crystals, Missouri; leucosphenite, Utah; beraunite, laubmannite, cacoxenite, turquoise, rockbridgeite, strengite, and manganite, Arkansas: with A. L. Kidwell, Tulsa, Oklahoma.
 Fifty-four specimens including a fine specimen of sursassite from various localities in Canada and the United States, with the Department of Mineralogy, University of Michigan.
 Moraesite with herderite in beryl, New Hampshire, with T. Seward, Toronto.
 Thirteen specimens from Czechoslovakia and one from Turkey, with Professor Jiri Konta, Charles University, Prague, Czechoslovakia.

Collected by Members of the Staff

Numerous fine specimens were collected in Ontario, Michigan, Switzerland, Czechoslovakia, Burma and Korea. Among these, vivianite was re-discovered in the Don River quarries of the Toronto Brick Company.

Purchases

The purchases for the collections are too many to list here in detail. Mention can be made only of the more outstanding items:
 Large aquamarine crystal, Brazil, from Allan Caplan, New York.
 Chrysoberyl crystal, Espirito Santo, Minas Geraes, Brazil, from Martin L. Ehrmann, Los Angeles.
 Pyrite crystal, Rio Marina, Elba, Italy; hauerite crystal, Destricella, Sicily: from Roberto Palumbo, Rome, Italy.
 Beryl crystal Minas Geraes, Brazil, from Harry Bookstone, New York.
 Danburite crystal group, San Luis Potosi, Mexico, from Scott Williams Mineral Company, Scottsdale, Arizona.
 Picromerite, Germany; tilleyite, Crestmore, California: from Ward's Natural Science Establishment Inc., Rochester, New York.
 Rough gem citrine, Brazil; beryl crystal, Brazil; large amethyst crystal with moving bubble, Brazil; six-inch quartz sphere, Burma: from Gregory, Bottley and Company, London, England.
 Barysilite, Franklin, New Jersey, from John S. Albanese, New Jersey.

Additions by Purchase to Gem Collection

Andalusite: chatoyant, 10.9 carats.
 Danburite: pale yellow, 19.5 carats; golden yellow, 7.3 carats; deep golden yellow, 2.8 carats.
 Enstatite: 13.0 carats.
 Fluorite: pink, 17.4 carats.
 Goshenite: chatoyant, 25.6 carats.
 Kornerupine: 6.4 carats; 2.8 carats.
 Moonstone: double cabochon, 39.7 carats.
 Morganite: 19.3 carats; chatoyant sphere, 482 carats; chatoyant cabochon, 118.6 carats.

Opal: free form, 94.5 carats, cabochon, 4.6 carats.
 Peridot: 87.1 carats; 83.3 carats.
 Rutilated quartz sphere: chatoyant, 582 carats.
 Sapphire: golden yellow, 179.4 carats; greenish yellow, 44.0 carats; Padparadschah, 28.6 carats; royal purple, 14.0 carats.
 Scapolite: yellow, 57.6 carats; chatoyant gray, 18.8 carats; chatoyant pink, 9.3 carats; chatoyant blue, 3.0 carats.
 Sinhalite: 29.1 carats; 16.7 carats.
 Spinel: amethystine blue, 61.5 carats; blue, 18.2 carats; red, 10.8 carats.
 Zircon: red, 77.6 carats.

Species New to the Royal Ontario Museum

Barboselite—Bull Moose Mine, Custer, South Dakota.
 Barnesite—Cactus Rat Mine, Grant County, Utah.
 Beta-roselite—Ihrtem, Morocco.
 Beta-uranophane—Faraday Mine, Faraday Township, Ontario.
 Boltwoodite—Emery County, Utah.
 Cannizzarite—Vulcano, Italy.
 Cerianite—Sierra de Bermejillo, Durango, Mexico.
 Cryptomelane—near Warrior's Mark, Pennsylvania.
 Dufrenoyite—Binnetal, Switzerland.
 Eckermannite—Norra Karr, Sweden.
 Ephesite—Griqualand West, South Africa.
 Francevilleite—Franceville, French Congo.
 Gerstleyite—Boron, California.
 Hummerite—Hummer Mine, Montrose County, Colorado.
 Kurnakovite—Boron, California.
 Laubmannite—Buckeye Mountain, Polk County, Arkansas.
 Legrandite—Mina Ojuela, Mapimi, Mexico.
 Leucosphenite—Green River Formation, Uintah County, Utah.
 Manasseite—Snarum, Norway.
 Moraesite—Palermo Quarry, North Groton, New Hampshire.
 Ningyoite—Ningyo-Toge Mine, Tottori Prefecture, Japan.
 Osumilite—Sakkabira, Japan.
 Paracelsian—Benallt Mine, Caernarvonshire, England.
 Plombierite—Crestmore, California.
 Rashleighite—Bunny Mine, St. Austell, Cornwall, England.
 Sabugalite—El Sharana Mine, North Territory, Australia.
 Saleeite—Rum Jungle, North Territory, Australia.
 Scorzalite—Victory Mine, Custer, South Dakota.
 Sinhalite—Ceylon.
 Vandendriesscheite—Palette Mine, North Territory, Australia.
 Woodfordite—Crestmore, California.
 Yavapaite—Jerome, Arizona.
 Yoshimuraite—Noda-Tamagawa Mine, Iwate Prefecture, Japan.
 Yugawaralite—Yudo Water Fall, Kanagawa Prefecture, Japan.

Life Sciences Division

Gifts

119 specimens of mammals, particularly from Manitoba, from J. R. Tamsitt.
Two passenger pigeons, from Mr. L. H. Beamer of Meaford and Mr. Paul Hahn of Toronto.
Two extinct Greater Prairie chickens, from W. Steele of Guelph.
Forty-eight research specimens of birds, from W. Dean of Toronto.
Many research specimens of fishes have been received from: Fisheries Research Board of Canada; Canadian Dept. of Fisheries; Ontario Dept. of Lands and Forests; Ontario Dept. of Planning and Development; National Museum of Canada; Quebec Dept. of Fisheries; University of Montreal; University of Michigan; University of Maine; University of Saskatchewan; Freshwater Research Institute of Drottingholm, Sweden; British Museum; Board of Fisheries and Game of Connecticut; Virginia Polytechnic Institute; University of Miami; Florida Game and Freshwater Fish Commission.
Madre Porarian coral from Florida.
Specimens of Trichoptera from Alaska, from Dr. G. E. Bell of Alberta.
Tiger Cub; kangaroo (2 specimens); polar bear; chinchilla (2 specimens): from Metro Parks Department.
Skulls from India; leopard (2 specimens); bear; water buffalo; boar: from W. B. Redman, Toronto.
Mounted polar bear cub, from Miss Helen M. Bond, Toronto.
Two wapiti antlers recovered from peat bog, Mr. Joe Bogdon, Galt, Ontario.
Bat, from Dr. R. F. Ewer, Rhodes University, Grahamstown, Union of South Africa.
Star-nosed mole, from Nigel Drayton, Gores Landing, Ontario.
Mole shrew (albino), from N. D. Laidley, Peterborough, Ontario.
White-footed mouse; red squirrel, varying hare (2 specimens); European hare: from R. V. Lindsay, Toronto.
Columbian Dorroucouli (Little Owl Monkey), from Ken May, Toronto.
Varying lemming, from S. L. Thompson, Leaside.
Skull of camel, from Toronto Parks Department
Caribou antler (from excavations in Frontenac Co.); Arctic shrew (6 specimens); varying hare (melano): from Ontario Department of Lands and Forests.
African antelope (3 skulls with horns); elephant, 1 foot, 2 tails, 1 tooth; mastodon, 1 tooth; pangolin 1; hippopotamus, 2 feet: from the Harris Estate.
148 specimens of birds.
38 prepared skins, from collector-friends of the Museum.
Two bird eggs.
720 specimens of *Esox* from North America and Europe, from the University of Montreal (via Dr. G. Prevost and M. Vianney Legendre).
About 200 specimens of fishes from British Guiana, from Mrs. R. McConnell.
About 150 specimens of marine fishes from Trinidad, British West Indies, from J. S. Kenney, Department of Fisheries, Port of Spain, Trinidad.
Specimens of *Esox*, from many states of the United States.
Specimens of fishes from: Barbados, British West Indies (via National Museum of Canada); Israel (via Miss Lyka Bograd, Haifa); Czechoslovakia (via Dr. Ota Oliva, Prague); Sweden (via Dr. G. Svardson, Drottningholm).
200 modern molluscs from Gulf Coast of Florida, from Mrs. V. Wooding, Toronto.
Ten modern marine molluscs from Corfu, Greece, from Miss Hilda White.

Exchanges

Fifteen specimens of birds, from University of Florida.
Sixteen specimens of birds, from Zoologische Museum, Amsterdam.
Seventeen specimens of birds, from National Museum of Victoria, Australia.
Eleven specimens of birds, from British Museum, London, England.
Thirty-six study skins from Sarawak, from Sarawak Museum.
Thirty-six study skins from British Guiana, from British Museum.
Two study skins from North America, from University of Michigan Museum of Zoology.

59 specimens of Ontario Mammals.

Many specimens of Canadian freshwater fishes.

Pelecypods and gastropods from Mancora and Chira River, Peru.

Many specimens of Ontario Trichoptera from Lake Superior and Southern Appalachian Mountains.

Raccoon; goat skull; dog skull; Parry's ground squirrel; shrew, 2 red-backed mice; meadow mouse; bog lemming; ground hog; skulls of beaver and fisher.

Twenty-five steel drums of freshwater fishes from Arctic Canada.

Approximately 800 specimens of Trichoptera from Algonquin Park.

Approximately 200 specimens of Trichoptera from North Carolina.

Twenty fossil plants of Upper Coal Measure age from Radstock coalfield, Somerset, England.

Five brachiopods and ammonites from the Lias of southern England.

Ten brachiopods from Jurassic limestone of Cotswold Hills, England.

Thirty cephalopods and brachiopods of Trenton age from palaeozoic outlier north of Orillia, Ontario.

Six fossil Scleractinian corals from Pleistocene age from Key Largo, Florida.

Three Scleractinian corals from Florida Keys.

Forty Pleistocene land snails from residual clays, Bermuda.

Purchases

83 specimens of birds from Montmagy and Kamouraska counties, from R. McNeil.

Collection of 57 small mammals from southeast Asia and Australia, from J. B. Foster.

70 study skins from Colombia.

254 study skins from Argentina.

30 amphibians; 21 reptiles, among these a Tuatara lizard.

Use of the Royal Ontario Museum Galleries and Studies

JULY 1, 1959—JUNE 30, 1960

| | <i>No. of groups</i> | <i>No. of individuals</i> |
|--|--------------------------|-------------------------------|
| A. Visitors | — | 265,929 |
| B. School Classes | | |
| 1. Metropolitan Toronto | 1,058 | 31,532 |
| 2. Province | 764 | 16,199 |
| 3. Unconducted | 377 | 9,554 |
| TOTAL | 2,199 | 57,285 |
| C. Groups other than Schools | | |
| 1. Ontario College of Art | 458 | 15,902 |
| 2. Division of Education | 71 | 5,232 |
| 3. Royal Ontario Museum Staff | 7 | 208 |
| 4. Scheduled classes U. of T. related to Museum subjects | 1,505 | 112,646 |
| 5. Scheduled classes U. of T. unrelated to Museum subjects | 52 | 9,817 |
| 6. Unconducted groups | 203 | 5,063 |
| TOTAL | 2,296 | 148,868 |
| D. Canadiana | — | 12,597 |
| E. Other uses of the Royal Ontario Museum | | |
| 1. University of Toronto | 1 | 20 |
| 2. R.O.M. Sponsored | 23 | 3,041 |
| 3. Un-sponsored | 87 | 20,577 |
| 4. Extension Courses | 24 | 1,914 |
| | 135 | 25,552 |
| SUMMARY | | |
| Visitors | — | 265,929 |
| School Classes | 2,199 | 57,285 |
| Groups other than Schools | 2,296 | 148,868 |
| Canadiana | — | 12,597 |
| Other uses of R.O.M. | 135 | 25,552 |
| TOTAL | 4,630 | 510,231 |

SERVICES OUTSIDE BUILDING BY R.O.M. TEACHERS

| | <i>No. of individuals</i> |
|---|-------------------------------|
| Teachers' travelling | 10,048 |
| Teachers' Training Course (Audio-Visual Aids) | 133 |
| Three adult groups | 62 |
| Sunnylea school | 62 |
| TOTAL | 10,305 |

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*Correct to April 1, 1961

